





THE

LEHIGH & BURR



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ADVERTISEMENTS.

THE LEHIGH UNIVERSITY,

SOUTH BETHLEHEM, PA.

FOUNDED BY ASA PACKER.

The object of the Institution is to give a thorough education in Civil, Mechanical, Mining and Electrical Engineering, in Chemistry, Metallurgy, the Classics, and in General Literature.

Through the liberality of its Founder, the tuition in all its branches is FREE.

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Elementary Physics.

For the Latin Scientific and Classical Courses:

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The examinations will be rigorous, and no student deficient in any branch will be permitted to enter in full standing.

For further information apply to the President,

ROBERT A. LAMBERTON, LL.D.,

Vol. 8.

DECEMBER 1st, 1888.

No. 5.

THE LEHIGH BURR,

PUBLISHED SEMI-MONTHLY, DURING THE COLLEGE YEAR, BY THE STUDENTS OF THE LEHIGH UNIVERSITY.

EDITORS:

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AUGUSTUS T. THROOP, '89,

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T is with regret we announce that one of our editors, Mr. T. C. J. Bailey, '90, has tendered his resignation to THE BURR Board. By reason of severe illness, Mr. Bailey has been unable to attend to his college duties for the greater part of this term, and therefore feels that his entire attention must be confined to his regular work during the remainder of the year. This leaves the Junior Class with but one representative on the board, whereas the class is entitled to three. Are there not some men of ability in that class who will make an effort to obtain a position on the editorial force of this journal? We shall feel the loss of Mr. Bailey's services all the more by reason of the fact that there is but little to guide us in the choice of a successor to the retiring editor.

EVERY year at this time, the President makes much ado about the unbounded generosity of the Faculty in allowing us an extra day in the Thanksgiving recess, and

particularly directs our attention to the fact that in the *Register* but one day in given, according to the rules. As the recess has, for a number of years, extended from Wednesday noon to Monday morning, it might save the President his usual speech, if the rules were so modified as to conform to what is now an established custom. To change this custom would be an act so entirely uncalled for, that it would rouse up considerable indignation among those to whom a rest of four or five days is gladly welcomed at this season of the year, just before the hard pull incident to the Christmas examations.

TE are sorry to see that gymnasium work this term is being greatly neglected by the majority of the students. The number of cuts in this department is as large as usual. During the class drill and bookwork exercises, very few men appear in full gymnasium costume. In order to give the freedom of action to body and limbs which practice in the gymnasium requires, it is necessary to be dressed in garments suited to the occasion, instead of ordinary street dress. Heretofore the excuse has been offered, and justly too, that the baths were out of order and unfit for use, but now a new shower-bath has been fixed up and the trouble otherwise remedied, and there is no reason why every man should not enter upon his gymnasium duties with a hearty enthusiasm. Ours is one of the handsomest and most complete gymnasiums, and one of which we can speak with pride, and to visitors it forms a very unfavorable contrast to see the men slouching through their exercises with apparently no interest in their movements.

CHOICE between French and German is allowed every student who takes a regular course in the University; either one or the other is required. Why is it that the study

of that language which will be of the most value in each course is not exacted of those who are pursuing that branch of study? We have heard numerous complaints lately from some of the chemists who are given references to German works on certain departments of the chemical science, when they have possibly never opened a book written in that language. It was never even intimated to them at the beginning of their course that a knowledge of German would aid them materially in their chemical studies. As most of the works to which they are referred have not been translated and there are no indications that they will be the chemists who have not taken German at all are more or less at sea. That no information in this regard is given at the outset of the course is a very provoking incongruity and one which THE BURR hopes will be speedily disposed of.

X /E would like again to call the atten tion of our students to the fact that communications will be gladly received and published. Many of our exchanges devote several columns in each issue to such expressions of opinion. While a student who is not a member of THE BURR Board cannot write an editorial, yet he can make known his ideas by means of a communication. Here we arrive at the true value of such articles. It is an expression of opinion by one who is not connected with the paper, and, as such, should be given due weight and authority. Our students do not seem to realize the fact that this department can be made a valuable one. The Burk has always in view the best interests of the University, and wherever a student sees a chance for improvement, he can give it publicity through our columns. We hope that this advice will not be unheeded, and we can assure our readers that the more communications we receive, the more interesting the paper will become to them, and that THE BURR will then be published in fact, and not merely in name, by the students of the Lehigh University.

T is within the memory of most of us that the journal of a certain college, not a thousand miles from here, presented a very spirited editorial in regard to several athletic contests which were soon to take place. After an earnest and touching exhortation to the home team and considerable self-inflation in general, the writer closed his article with the heroic remark in italics: "Lehigh must never defeat Lafavette!" A few months previous to the appearance of this interesting composition, an annual known as the Melange was issued at the same institution, and the editors thereof attempted to exercise their gifts of prophecy by making a little prediction with reference to the millenium. After the mention of several unimportant incidents which must take place before the advent of the "thousand years of peace," the usual italics were employed to express a brief bit of sarcasm to the effect that the millenium would be at hand, "When Lehigh defeats Lafayette." Inasmuch as the millenium is to be a period of a thousand years during which time the hosts of righteousness are to triumph over the King of Evil and the powers of darkness, perhaps the exact inference to be drawn did not occur to the writer, or possibly the meaning of the term might not have been known to him. Be that as it may, we accept the metaphor and hail the millenium. Since the time when Lehigh was told that she must never defeat Lafavette, the two colleges have met in four contests on the foot-ball arena. Three times has the banner of the brown and white been borne in triumph from the field, and THE BURR shares with all good friends of Lehigh in the rejoicing over the successes which have been so fairly and honestly won. To the manager, captain, and members of this year's team, we tender our sincere congratulations for the double victory which you have gained over our old rival. The millenium has come!

[—]A large number of men accompanied the foot-ball team to Elmira on Thanksgiving Day.

THE STATE FOOT-BALL CHAMPIONSHIP,

HETHER the title of Champions of the State of Pennsylvania belongs to University of Pennsylvania or to Lehigh is an open question. The games of the season resulted as follows:

		LEHIGH.	U. OF PA.	LAFAYETTE.	LOST.
Lehigh,	-	_	I	0	I
Univ. of Pa., -		0	_	I	I
Lafayette,	-	2	I		3
				_	_ ·
Games won,	-	2	2	I	5

From this, the University of Pennsylvania is tied with us. Looking at the matter as the Philadelphia *Press* of last Sunday did, Lehigh has the championship. On Nov. 7, Pennsylvania played Lafayette, who won the title last year, and the former failed to wrest it from her opponents. Lehigh won both games from Lafayette, whereas Pennsylvania defeated her but once. Hence, as the *Press* says, it would appear that Lehigh has the championship.

THE REGISTER

THE official catalogue of the University for 1888-89 appeared on the 19th inst., and in almost every respect is similar to its predecessors. The cover is again one of very thin green paper and does away with the hopes so often expressed by THE BURR that the college colors might, with very excellent effect, be combined in the binding, The Faculty numbers 13 professors, 1 lecturer and 17 instructors. The total number of students in college is 383, divided thus: Graduates, 22; Seniors, 59; Juniors, 59; Sophomores, 99; Freshmen, 122; Specials, 22. We note, with pleasure, that the requirements for admission to the Classical course have been reduced slightly; only four book of Chauvenet's Geometry being required, instead of six as heretofore. The new course in Electricity is fully presented and an announcement is made that a course in Architecture, leading to the degree of Bachelor of Science, has been outlined and the progamme of studies will appear in the Register for 1889-90. It will be parallel to

the other courses in the school of Technology, and for the first year will be the same as the course in Civil Engineering. There is a great deal of matter in the *Register* which might well be omitted and, in particular, "The List of Donations," the insertion of which is simply ridiculous,

FOOT-BALL.-A SKETCH.

T this time, when every college student is speaking, thinking, and dreaming of foot-ball, it may not be out of place to say a few words concerning the origin and progress of this popular game. As originally played in England it differed materially from its modern American form. The goals were only eighty feet apart, and each consisted of two sticks driven into the ground, two or three feet from each other. There were an equal number of players on each side, but no particular limit as to the number. The ball was placed in the centre of the ground, and one of the players advanced and kicked it. All of the rest immediately joined in the game, and each party tried to drive the ball through their opponent's goal by kicking it. The ball was not carried at all, but was kicked over the field until one goal was made, and the game was won.

Games of ball have been popular from the remotest times. We find them mentioned in the earliest literature of the Greeks. The game which most closely resembled our football was of Spartan origin, and was called *cpiskyros*. A large hollow ball was placed on a line, on either side of which were gathered a number of players. The ball was passed back and forth until one party was driven behind its boundary line, and the game was ended.

The Romans had a leather ball called the *follis*. With this, they played a game called *harpastum*. An old writer on Roman antiquities describes this game as being played by two opposing parties, each guarding a goal. Carrying the ball was allowed, and the object was to throw it into the opponent's goal.

Foot-ball was undoubtedly introduced into England by the Romans at an early date. It soon became very popular, especially among the middle and lower classes of people. In the beginning of the present century, however, it began to be played in so rough a manner and foul means were so often resorted to in order to win the game, that it gradually died out in the towns. The game was still honorably played in the schools, and it has been kept up by them ever since, under two distinct forms. One of these, the Rugby game, is well described in Tom Brown's School Days, and is the same game that is at present played, with some modifications, by our colleges. The other game, called the Association, is played with a round ball; kicking alone is permitted, and the object is to kick the ball between the goal posts and under the cross-bar.

In America, Harvard and Yale seems to have been the first to introduce foot-ball. It has long been customary at these colleges for the Sophomores to challenge the Freshmen to a contest. The game was very rough in early times, and became a subject for many writers of verse. In the Harvard *Register* for 1827, may be found a poem beginning:

"The Freshman's wrath, to Sophs. the direful Spring Of shins unnumbered bruised, great goddess, sing!"

Another extract will serve to show what precautions the spectators took to insure their safety:

"Meantime the Seniors, on the ladder raised, Upon the strife sublime, intentive gazed; Secured from blows by elevation high, The fight they viewed with philosophic eye, Save here and there a veteran soldier stood, A noble darer for the Freshman's good."

The rules of the game are being constantly revised, and the game is becoming more scientific. Its great popularity is well deserved, since an athletic contest, involving a more active use of both brain and brawn, could not well be devised.

BOTH GAMES WON!

LAFAYETTE GIVES UP THE MUCH VAUNTED SUPREMACY.

THE TEAM GAINS A SPLENDID VICTORY AT EASTON ON NOV. 17—THE PERFORM-ANCE REPEATED LAST SATURDAY. SCORE IN THE FIRST GAME, 6 TO 4; IN THE SECOND, 16 TO 0.

LAFAYETTE 4; LEHIGH 6.

THE long cherished ambition of Lehigh men from an athletic point of view was realized on the afternoon of Saturday, Nov. 17, when our foot-ball team defeated Lafayette's on their own grounds. Contrary to precedent, the weather was all that could be desired, and a large and enthusiastic crowd of students and friends of the University filled the special train which left the Union depot for Easton, early in the afternoon. It must be admitted, however, that the general feeling was far from one of confidence as to our ability to win. Neither Rafferty nor Riddick were in fit condition to play, and this loss of two of our best rushers made it necessary for Corbin to play on the rush-line, while Lawder took his place at half. It had been arranged that R. N. Corwin, Yale '86, should referee, with W. C. Price, Princeton '88, as umpire.

Mr. Corwin was delayed on the way, and as he did not arrive at the time for calling the game, Mr. Price consented to perform the duties of both referee and umpire until the regular referee should appear. Play was called at 3:08. Captain Camp won the toss for Lafayette, and took the ball. Lehigh defended the western goal, taking advantage of the slope, and being favored by the wind and sun. Camp started with the ball as time was called, but neither he nor Pilgrim made any material gain, and after three downs, it went to Lehigh on a foul, Lafayette having lost ground in order to hold the ball. Lawder gained five vards for Lehigh, but no further advance was made. Camp, not being blocked, downed Graham back of the line, and the ball

went back to Lafayette on four downs. Camp made ten yards, and March added five, but lost the ball, and it was secured by Detweiler. Lawder gained, and Graham carried the ball ten yards farther towards the opposite goal. Lawder gained once more, but four downs lost the ball to Lafayette, and four more returned it to Lehigh without gain on either Warriner kicked to Camp, and after three downs, March returned it to Graham. The latter gained but Warriner dropped the ball, and a touch-down for Lafayette seemed imminent; Lawder captured the ball, however, at the thirty-yard line. Mr. Corwin arrived at this time and acted as referee during the remainder of the game, and Mr. Price performed the duties of umpire. Offside play gave Lehigh five yards, and immediately afterward Graham broke through the Lafayette line, and planted the ball twenty yards nearer the goal line. The Lehigh audience had scarcely realized the merits of this fine run. before Warriner was seen making for the goal line in his usual good style, with only one man to stop him. The result, as may be imagined, was a touch-down squarely behind the goal posts. Dougherty kicked the goal, and confusion reigned supreme on the Lehigh side of the field. Time, 25 minutes. Score. 6 to o.

Lafayette now seemed to wake up, and the ball was in Lehigh's field during the remainder of the half. The ball changed hands several times on four downs, but kept working towards Lehigh's goal. Camp, March and Pilgrim carried it to Lehigh's twenty-yard line, but it went to Lehigh on a foul. Poor play by Lehigh soon returned the ball to Lafayette, and Camp and Pilgrim rushed it forward to the five-yard line. Camp broke through and made a touch-down. Score, 6 to 4.

Detweiler interfered with the punt-out, and Lafayette had the ball down only ten yards from the line. Another touch-down by Lafayette seemed probable, as Pilgrim carried the ball to within one yard of the line, but a foul gave Lehigh the ball, and Lawder, Graham and Warriner carried it rapidly away from the danger line.

Finally Warriner kicked; the play was returned by March, and it was a kicking game until Referee Corwin called time at 4:04 with the ball in Lafayette's possession in Lehigh territory. Lehigh started play again at 4:15 with a beautiful "V" rush, by which Walker gained twenty yards. After another gain, four downs gave Lafayette the ball, and Camp started it the other way by five yard incre-What might be termed "a lively scrap" took place about this time among the rival players, and the spectators showed a decided tendency to take a hand also, but the excitement was finally quieted, and the field cleared again for action. Both teams now settled down to a steady, determined game, and the individual plays were not particularly conspicuous, though the tackling of Lawder and Emery, and Graham's punting were all worthy of the applause which they received. Both sides made fouls by the wholesale, and a fine run by Corbin, which placed the ball on Lafayette's five-yard line, was of no avail by reason of a foul by one of the Lehigh rushers. Camp, by short but determined rushes, carried the ball well towards Lehigh's goal, but Emery's tackling had the effect of a handicap, and the leather went to Lehigh on a foul by Lafayette. Lawder gained, but Graham was obliged to kick, and March's return was secured by Warriner at our fifteen-yard line. After three downs, Graham kicked again, and March returned with a long punt which sent the ball rolling over the line, but Warriner secured it and touched it down. Time was called at 5:10 as the kick-out was made from the twenty-five-yard line. Score, 6 to 4 in favor of Lehigh!

Lafayette's contingent could scarcely believe their senses, but Lehigh grasped the situation and the players in one and the same instant. The victorious team was carried from the field amid the liveliest manifestations of joy from the Lehigh delegation, and the cheer for the brown and white rang through the streets of Easton as it never had occasion to ring before. The teams were:

Lafayette: Full-back, March, '92; half-backs; Camp (captain) and Pilgrim; quarter-back, Walter; rushers, Beatty, Wells, Young, Williams, Mackey, Harry, and Robinson.

Lehigh: Full-back, Warriner; half-backs, Graham and Lawder; quarter-back, Walker (captain); rushers, Emery, Corbin, Detweiler, Martin, Ayres, Dougherty and Frescoln.

The decisions of the referee and umpire were fair and impartial in every respect, and they deserve the thanks of both colleges for the efficient performance of their duties. The characteristic attack upon Mr. Price in one of the Easton papers showed a lack of good sense in the writer, and if he is a Lafayette student, we would be sorry to know it.

On the whole, the game was well played on both sides, though the number of foul plays which were made was something remarkable. Intense excitement prevailed during the whole time, and the tension on the nerves of the Lehigh spectators during the second half was such as to cause an exhibition at the close as is seldom witnessed except in the demonstrations of college undergraduates. For Lafayette, Camp, March, Pilgrim and Harry did the most effective work, and the team's playing as a whole was good. Lehigh's "Freshman halfbacks," Graham and Lawder, did excellent work, and the steady, cool-headed playing of Walker and Warriner was worthy of high praise. The rush-line work was good, and Emery's tackling deserved special mention.

LAFAYETTE VS. LEHIGH, 0–16.

The University eleven defeated the Lafayette Foot-ball Team in one of the most interesting games of the season, on Saturday, the 24th ult., by the score of 16-0. The Lafayette men, who on the preceding Saturday were offering odds of two to one against Lehigh, were conspicuous for their absence, but a few,

whose faith in their team was stronger than their judgment, expressed themselves willing to bet if five to one were given.

The game was decidedly monotonous, not a single great run or particularly brilliant play being made. Lehigh played a miserable game during the first half. Her blocking was lamentably poor, Lafayette getting through every time, and thus our backs were prevented from making any runs. For Lehigh, Rafferty, Dougherty and Corbin did the best rushing. Graham kicked well, and the whole team tackled in their usual good manner. For Lafayette, Harry and Pilgrim played the best game, Harry's rushing being up to his usual good standard.

Mr. Corwin, Yale '86, who was to referee, telegraphed at the last moment that he was unable to come. Mr. W. C. Price, Princeton '88, the umpire, consented to act as referee also, both of which positions he filled very acceptably.

Play was called at 3:12; Lafayette won the toss and took the ball, Lehigh defending the east goal. Glover dribbled the ball to Pilgrim, who made ten yards. Pilgrim and March gained five more. The ball then went to Lehigh on four downs. The ball was passed to Warriner, but Lafayette broke through and he lost five yards. Graham kicked to March, who passed to Coates, but he was tackled and dropped the ball and Rafferty secured it. Rafferty ran ten yards, but a foul soon gave Lafayette the ball. On four downs, it returned to Lehigh. It was then passed to Graham, but Lafayette again broke through and he lost ten yards. It was passed to Corbin and the same performance was repeated. Graham kicked on the third down. It was fumbled by March, and Corbin, in attempting to get the ball, made a forward pass. The ball was then passed to Pilgrim, but Dougherty and Emery broke through and tackled him, he losing ten yards. The ball then went to Lehigh on four downs. Graham kicked, but the ball was fumbled by March and Emery secured it. It was passed to Warriner, but Wells broke through and

THE LEHIGH BURR.—SUPPLEMENT.

Vol. 8.

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No. 5.

DR. COPPÉE'S LECTURE.

N Thursday afternoon, Nov. 22, Dr. Coppée delivered a very entertaining lecture before the Engineering Society upon the incidents of his recent trip to California. gave the particulars of the journey in that happy vein so peculiar to himself, and spoke at length upon many points of special interest. Among these were: Denver, Pike's Peak, The Garden of the Gods, Royal Gorge, Marshall Pass, and the Mount of the Holy Cross. The railroad through Marshall Pass received mention as being extremely interesting to engineers. He then described the Great Salt Lake and Salt Lake City. The lake is one of those geographical curiosities, of which our country has a considerable number, and the lecturer stated some scientific facts in regard to it which were quite new to the majority of his hearers. He gave his impressions of San Francisco and of California in general, and was quite warm in his praise of the Golden State from a climatic as well as a business stand point.

THETA DELTA CHI CONVENTION

THE forty-second annual convention of the Theta Delta Chi Fraternity was held at the Fifth Avenue Hotel, in New York City, on Nov. 21, 22 and 23, the Hon. Arthur L. Bartlett, of Boston, Mass., presiding. A banquet was held at the hotel on Friday evening; the toast-master was Rev. Dr. Thomas, of Providence, R. I.; poet, Rev. Lewis E. Halsey; orator, Hon. Jacob Spahn, of New York.

Julian G. Hearne, '91, and Lester H. Ely, '91, represented the Nu Deuteron Charge of Lehigh University.

COLLEGE NOTES.

—Out of 380 universities and colleges in the United States, only 175 publish papers.

- —Isaac V. Williamson, of Philadelphia, has given \$3,000 000 to establish an industrial college in that city.
- —Last year there were 12 American students in attendance at Oxford, 600 in the University of Berlin, and over 200 at Leipsic.
- —The Dartmouth Faculty have resolved to adopt the marking system in vogue at Harvard, and each student hereafter will have no definite rank in his class.
- —An astronomical expedition is being fitted out at Harvard for the purpose of observing the total eclipse of the sun in Calfornia, and of going to Peru to observe the Southern heavens.

—The following extracts are taken from a letter received from the *Collegian*, a new paper which is to be devoted to the interest of American Colleges:—

WAKEFIELD, MASS., Sept. 29, 1888.

EDITORS.

Dear Sirs.—In the first convention of the New England Intercollegiate Press Association, held Feb. 22, 1887, the feasibility of an established magazine, to be recognized as the official organ of the body, was extensively discussed. The idea as a project was finally abandoned.

After the lapse of a year or more the principle has come to activity again, but in a modified aspect. The ground work is now under way, upon which a periodical will take its place to be known as the *Collegian*; not the mere reprepresentative of the N. E. I. P. A., but of the American undergraduate.

The *Collegian* will resemble *Lippincott's* in size and general makeup, and its contents will be much as follows:

One Special paper				10 or	12 pages.
Two Prize Stories, each					10 pages.
Two Prize Essays, each					10 pages.
Two Prize Poems, each					ı page.
Editorial columns, .					6 pages.
Rostrum,					6 pages.
Preparatory School Depa	rtm	ent,			15 pages.
Letters, Berlin, Oxford, e					10 pages.
Electric and Chronologic	at L	eparti)	nent	S, .	15 pages.
Athletic,					10 pages
Book Review, .					10 pages

Now, as to our scale of prizes:

For the best Essay, any subject, 6000 words limit. \$50.00 For the best Story, any plot whatever, 6000 words

limit,					50.00
For the best Poe	m, 40 lin	es limit,			15.00
For the second b	est Essa	y, 6000 w	ords 1	imit,	25.00
For the second b	est Story	, 6000 W	ords li	mit,	25.00
For the second b					
For the best Edit					25.00

First topic for "Rostrum"—"Will the Collegian interfere with the individual work of the College Press?"

Our subscription price is fixed at \$3.00 per annum, and twelve numbers will be printed, the first appearing in December. '88, as the January number—provided a subscription list sufficient to guarantee publication be obtained prior to December 1; if not, then delay must ensue, but the *Collegian* is a mere question of time, and is a fact of the near future. Articles and contributions for this number will be due on or before Nov. 1, 1888, at the address given below. Contributors must sign full name, class and college.

We trust, in closing, that we are to have your heartiest cooperation, and expect to unite with you as friends of long standing.

The Collegian, Wakefield, Mass.

Samuel Abbott, Wa Pres't N. E. I. P. A., Chairman Editorial Board.

—The verses entitled "A Deception" which appeared in The Burr for June 21, 1888, were copied with proper credit in a recent issue of *Texas Siftings*.

CLIPPINGS.

AN EXPLANATION.

YOU ask why I knelt at her feet last night, In a shadowy nook of the dim-lighted hall, And why for so long in that attitude bowed? 'Twas to fasten the tie of her slipper,—that's all.

And why should I blush when you question me now? Don't you think you could guess if you really tried? For why should I blush, unless it's because 'Twas a love-knot that last night I tied?

- Vassar Miscellany.

ELSINORE.

HAVE loved thee, Elsinore,
Since the yellow crocus budded,
Since the world with light was flooded,
In the green of spring-time hooded,—
Three long years ago, and more,
I have loved thee, Elsinore.

I shall love thee, Elsinore;
While the moaning billows tumble,
While the distant thunders rumble,
I shall be thy lover humble;
I shall love thee and adore,
I shall love thee, Elsinore.

Smile upon me, Elsinore;
Say not that thou canst not love me,
Place not others' charms above me,
Let the proof of union prove me.—
None can love as I adore;
Smile upon me, Elsinore.
—Harvard Lampoon.

AT THE PLAY.

THE freshie wondering what mamma would say, Sneaks slyly down to see the play By the back way.

It surely is naughty, but then it's so nice E'en from a seat in the Paradise.

The sophomore loud with air blasé,
Stalks boldly down to see the play
And sits in "A";
Whence he eyes the priestesses of song.
Through lorgnette large or field glass long.

The junior so elegant, free and gay
In dress suit goes to see the play
In a coupé.
She nestling closely to his side

Who hopes some day to be his bride.

The senior prematurely gray With dignity walks to the play Without display.

He marks the acts with eye and ear While he thumbs the notes in Rolfe's Shakespeare.

— The Brunonian.

DR. WILLIAM A. HAMMOND, the World-Famed Specialist in Mind Diseases, says: "New York, July 10, 1888. I am familiar with various systems for improving the memory, including, among others, those of Feinaigle, Gouraud and Dr. Pick, and I have recently become acquainted with the system in all its details and applications taught by Prof. Loisette. I am therefore enabled to state that his is, in all its essential features, entirely original; that its principles and methods are different from all others, and that it presents no material analogies to that of any other system.

"I consider Prof. Loisette's system to be a new departure in the education of the memory and attention, and of very great value; that it being a systematic body of principles and methods, it should be studied as an entirety to be understood and appreciated: that a correct view of it cannot be obtained by examining isolated passages of it.

WILLIAM A. HAMMOND.

To Prof. Loisette, 237 Fifth Avenue, N. Y."

tackled him. Graham again kicked and Pilgrim secured the ball. Coates fumbled the ball and Rafferty dropped on it. Walker made a fine long pass to Corbin, who made ten yards before he was downed. The rush-line failed to block and Graham lost fifteen yards. The ball then went to Lafayette on four downs. It was passed to Pilgrim, who gained five yards. March kicked to Warriner. Graham returned to March, who fumbled, and Emery secured the ball at Lafayette's forty-yard line. Graham kicked on the third down. March fumbled and the ball crossed Lafayette's goal line. Frescoln dropped on it, making the first touchdown in twenty-three minutes from the start. Dougherty kicked goal. Score, 6-o.

The ball was taken to the centre of the field. and dribbled to Pilgrim, who gained five yards, It was passed to March, who was tackled by Frescoln and lost five yards. March kicked the ball, but by Warriner's poor judgment in touching the ball, it was secured by Lafayette. On four downs it went to Lehigh. Graham kicked on the third down. March caught it and passed it to Pilgrim, who was downed at Lafayette's forty-yard line. Lehigh's ball on four downs. Rafferty made a beautiful run of fifteen yards. Corbin gained ten more, and Rafferty repeated the offense with five more. Warriner then made a good run, which was followed by twins by Rafferty and Corbin. Dougherty did the same, and the ball, by short rushes went to Lafayette's fifteen-yard line. On four downs, the ball went to Lafayette. It was passed to Pilgrim, who made no gain, and March kicked to Warriner. Short runs by Warriner and Corbin and kicks by Graham brought the ball to Lafayette's ten-yard line. On four downs it went to Lafayette. The half closed with the ball in their possession on their twenty-yard line.

The second half opened with the ball in Lehigh's possession. The playing of the team was much more spirited this half, Lehigh blocking better and playing a more aggressive game. The play was almost entirely in Lafay-

ette's territory. Ayres here took Riddick's place. Corbin and Warriner made short runs, but the ball went to Lafayette on four downs. Pilgrim made short runs. March kicked to Warriner, and there followed more kicking than has been seen on the grounds for a long time. Emery was here disqualified and Reese took his place. The ball went up and down the field till it was passed to March, who kicked. Dougherty blocked the kick, the ball crossed the line and Dougherty fell on it, making the second touch-down. No goal. Score, IO—O.

March kicked out, Walker secured the ball and ran thirteen yards. Rafferty made a good run, but was tackled by Harry, and was injured. Corbin took Rafferty's place in the rush-line, and Lawder took Corbin's as half back. Runs by Lawder, Graham and Warriner brought the ball to the five-yard line. Dougherty gained some, and Lawder broke through to within one yard. On the third down, Warriner took it to within a foot. Dougherty rushed the ball over the line, making the third touch-down, from which he kicked goal. Score, 16–0.

The ball was taken out, and by good rushing, Lafayette got the ball well into Lehigh's territory. March made a kick over, which Lawder secured. Warriner kicked to Lafayette on the forty-yard line, and time was called. The teams were:

Lafayette: Back, March; half-backs, Pilgrim and Taylor; quarter-back, Coates; rushers, Robinson, Wells, Oliver, Glover, Mackey, Harry (captain) and Smith.

Lehigh: Back, Warriner; half-backs, Graham, Corbin and Lawder; quarter-back, Walker; rushers, Frescoln, Dougherty, Detweiler, Martin, Riddick and Ayres, Rafferty and Corbin, Emery and Reese.

[—]We are indebted to numerous contemporaries for the very complimentary notices which they have accorded the appearance and contents of The Burr.

COMMUNICATIONS.

[The editors are not responsible for any opinions expressed in this column. No anonymous communications published.]

POITORS LEHIGH BURR:—Almost every year students withdraw from the Department of Literature to take a technical course, but we have yet to hear of a technical student who gave up his course in favor of a literary one. Why should this be so? There must certainly be a reason for it. Men of wide experience advocate the utility of being well grounded in the languages, literature and history of the world before confining the whole attention to a technical course.

The majority of our students will, if questioned, reluctantly admit the truth of this statement.

Young men, sixteen years of age, and even less, pass our entrance examinations, and after taking a four years' course, go into the world to compete with engineers whose experience and practical work extends over a period of many years. These men know nothing of the world beyond their own limited sphere.

The remark has even been made by upper classmen that they have never read a book in the Library that had no immediate connection with their line of work.

It would seem that more attention should be paid to general literature in our University. There will at once be a universal cry from our students that they have no time outside of their studies. If this be the case, the remedy must be sought in another direction. Our courses should be changed so as to admit of more literary work. During the first years of the University's career, Latin, Greek and Literature, were prescribed for one or two years in the technical department.

The literary, and especially the classical department, should have its curriculum modified to accord with the systems of other colleges.

The requirements for admission to these courses might be lowered, as suggested in

a previous number of The Burr, so as to compete with our neighboring colleges. In short, every means should be used to secure the desired end—an increase in the number of literary students. If such students would come in greater numbers, the influence they would exert on other students would not be inconsiderable, and Lehigh would soon have as honorable a place among literary colleges as she now has among technical institutions.

Belles Lettres.

DITORS LEHIGH BURR:—The new rule of the Faculty with regard to keeping weekly marks from the students has not been commented upon in print, but there is, nevertheless, great dissatisfaction amongst us with regard to it.

For what good purpose it has been put into practice, the Faculty alone are aware. It would certainly seem that a student has a right to know the result of his work as he does it, without having to wait until the end of the term, when he loses all sight of the value placed upon any particular week's work.

Aside from this, the uncertainty, continually resting upon him, as to his standing is neither pleasant nor conducive to better recitations. It is well known that a man cannot tell at the end of his recitation what mark he is liable to get, and it is thus seen that a very great degree of uncertainty is easily reached.

Last year, when the weekly marks were known each week, we have the testimony of those in authority that the 8.5 rule proved very satisfactory, and the reason for this is obvious. For when the student found that he was near enough the 8.5 to reach it by harder work, his knowledge of this fact stirred him up to increased exertions in that direction and likewise he whose mark was excellent was urged to keep it so, while he whose mark was below 5 had plenty of warning and an opportunity of raising it.

The whole marking system is a very unreliable and unjust criterion of a student's know-

ledge, as no two instructors will give the same mark for the same recitation, but the time has not yet come to Lehigh when the evil shall be done away with. However, it is unpleasant to see a great relaxing influence repealed and a retrograde motion taken on the subject.

We venture to predict that the Christmas examinations will practically demonstrate the bad effect of this rule in the falling off of the number of students whose marks are above 8.5, as well as the number of those who pass at all, more particularly in the Freshmen Class. We hope sincerely that the objections, whatever they could have been, to the students having their marks, will shortly be overcome and the Faculty will once more give to us what certainly seems to be our right.

Jus.

DE ALUMNIS.

[Contributions to this department are solicited.]

- '72.—D. P. Bruner, C. E., is Civil Engineer, Architect and Builder, at 4834 Morris Street, Germantown, Pa.
- '75.—A. E. Meaker, C. E., Instructor in Mathematics, has been elected a member of the American Association for the Advancement of Science.
- '81.—C. W. Gray, A. C., is located at Oakland, Fla., occupying the position of Auditor for the Orange Belt Railroad.
- '83.—T. J. Donahue, A. C., is in the laboratory of the Bessemer Steel Works, at Troy, N. Y.
- '86.—P. D. Millholland, C. E., is an Assistant Engineer on the George's Creek & Cumberland Railroad, at Cumberland, Md.
- '87.—J. W. LaDoo, C. E., is an Assistant to C. W. Knight, Hydraulic Engineer, at Rome, N. Y.
- '87.—J. M. Howard, M. E., is connected with the new plant of the Latrobe Steel Works.
- '87.—G. F. Yost, M. E., is a draughtsman for the C. M. Hunt Co., at West New Brighton, Staten Island, N. Y.

- '87.—F. S. Smith, A, C., has charge of the Lamp Department of the Westinghouse Electric Light Company, at Pittsburg, Pa.
- '87.—J. B. F. Hittell, C. E., is in the office of the Assistant to the Division Engineer of the Chicago, Santa Fe & California Railroad Company, stationed at Galesburg, Ill.
- '87.—M. D. Pratt, C. E., is with the Johnson Steel Street Railway Co., of Johnstown, Pa., and is now laying a track in Washington, D. C. He was declared elected a Junior member of the American Society of Civil Engineers, at the meeting in September.
- '88.—H. M. Wetzel, C. E., is one of the partners in an engineering firm at Sioux City, Ia.
- '88.—H. S. Neiman, A. C., is a Chemist for the Aniline Works, at Albany, N. Y.
- '88.—G. S. Franklin, M. E., is with G. M. Steinman and Co., Hardware Dealers, Lancaster, Pa.
- '88.—H. A. Bonzano, C. E., is taking a post-graduate course at the University of Pennsylvania.
- '88.—J. S. Mack, C. E., is on the Engineer Corps of the Lehigh Valley Railroad, stationed at Hazleton, Pa.
- '88.—S. Yamaguchi, C. E., is with the Pennsylvania Railroad Co., N. W. System, at Allegheny City, Pa.
- '88.—H. L. McIlvain, A. C., is a member of the firm, Wm. McIlvain & Sons, manufacturers of boiler plate, at Reading, Pa.
- '88.—P. H. DeWitt, C. E., is on the Engineer Corps of the Lehigh Valley Railroad, stationed at Jersey City, N. J.
- '88.—J. B. Glover, M. E., is in the Mechanical Engineering Department of the Georgia Central Railroad Co., at Savannah, Ga.
- '88.—S. W. Frescoln, C. E., has returned to Lehigh, to pursue a post-graduate course in Civil Engineering and Mathematics.
- '88.—L. R. Zollinger, C. E., who is for the present at his home in Harrisburg, Pa., was in

town about two weeks ago and attended the Lafayette-Lehigh game, Nov. 17.

'88.—G. A. Hart, M. E., has obtained a position as draughtsman in the office of the Chief Engineer of the Georgia, Florida & Western Railroad, at Savannah, Ga.

KERNELS.

- —Did any one remark that Lafayette is in the soup?
- —A movement has been started in college to form a Chess Club.
- —Fraternity conventions seem to be quite popular just at present.
- —The foot-ball team dined with the Psi U's at the Eagle Hotel, Sunday, Nov. 25.
- —The average Senior now begins to think of his thesis with fear and trembling.
- —The Senior Assayists had their picture taken in front of the Laboratory on Nov. 20.
- —The Freshman Class has taken up Trigonometry this term in advance of their regular work.
- —R. H. Davis, '86, and Harry Toulmin, '86, were in town to witness the game on the 24th.
- —Several Lehigh men witnessed the Yale-Princeton championship game in New York on Nov. 24.
- —Most of the advance work for this term has been completed and the classes are now reviewing.
- —Rev. Dr. Osborne, of Chicago, preached an interesting sermon in the Chapel on Sunday, Nov. 18.
- —Thanksgiving recess began on Wednesday, Nov. 28, at 11:30, and closes Monday morning at 8:15, *sharp*.
- —Competitors for the prizes offered in The Burr of Nov. I will please have their work in by Wednesday noon.
- —C. R. Hinchman, formerly of '89, is employed in the office of the Southern Pacific Railroad shops, Sacremento, Cal.

- —Boynton, '89, refereed and Johnston, '89, umpired the Lafayette–University of Pennsylvania game at Easton on November 7.
- —The Glee Club are seeking for a first tenor to fill up their full quota of sixteen men. Applications for this place are earnestly desired.
- —William Jennings, ex-'90, was in town Nov. 17, and had the opportunity of seeing Lehigh defeat Lafayette at Easton.
- —The Junior Civils complain that they are much crowded with their drawing, and have petitioned for an extension of time on their topographical mapping.
- —Prof. Chandler was appointed on November 14, by President Cleveland, as assistant to the United States Commissioner General at the Paris Exposition in 1889.
- —The editors have purposely delayed the distribution of this number two days on account of most of our students being away during the recess at the date the issue is due.
- —Stokes, '88, and Schwartz, '89, were the delegates of the Psi Chapter of Chi Phi to the annual convention of that fraternity held in Richmond, Va., on Nov. 15, 16 and 17.
- —Morrow, '89, Boynton, '89, and Carson, '89, were the delegates of the Nu Chapter of the Delta Phi Fraternity to their annual convention held in New York on November 22, 23 and 24.
- —Dr. Marsh has introduced a new feature in his department by having the Seniors and Juniors themselves deliver lectures on Organic Chemistry. The scheme has succeeded very well thus far.
- —A scrub team, excluding even the substitutes on the 'Varsity team, went to Harrisburg on Thanksgiving Day to play a team composed of old Lehigh men, now resident in that city. Long, '89, captained the scrub.
- —In accordance with the suggestion offered in The Burr, a suitable looking glass, with brush, comb and whisk-broom attached, has been placed in the choir room for the convenience of members of the choir.

- —The Freshmen took an unfair advantage of us. We had expected to write several editorials on the grand stand question before the year closed, but now it is too late. However, the question of a new one must be agitated.
- —Prof. Doolittle lately informed the Sophomores that on account of their seeming inability to learn any mathematics whatever, it would be necessary to omit twenty pages of the hardest part of Davies' Analytical Geometry.
- —H. H. Egbert, formerly a member of '89, is in San Francisco, Cal. He has a position as Night Manager of the California *Associated Press*, and is also special correspondent for the Boston *Globe*, Salt Lake *Tribune*, and the Oakland *Tribune*. His address is 23 First Street.
- —The University Guild held its last meeting for this term, Nov. 25. Officers were elected as follows for the ensuing term, and then the Guild adjourned until Jan. 13: President, F. L. Grammer; Vice-President, Chas. P. Turner; Secretary and Treasurer, P. M. Paine.
- —Senior to Freshman—"You had better brace up and study your Algebra for the first examination, or you'll get stuck for \$5.00 on the re-ex."

Freshman—" Well, I should dislike to flunk, but I see by the Register that my \$5.00 would be put to a good use, as such fees go to aid the indignant students."

- —On account of a press of matter, we have been compelled to issue a supplement to this number, and even with the unusually large amount of news we present this week, the discussion of several topics must be reserved for the next issue. If such an abundance of subjects were prevalent during the entire year, the life of an editor of The Burr would not be especially burdensome.
- —At a meeting of the Engineering Society on the evening of Nov. 15, an interesting discussion took place on the merits of "Riveted vs. Pin Connected Bridges." The case for the riveted structures was presented by S. W.

- Frescoln and E. A. Wright, while C. H. Deans and E. Diebitsch advanced the arguments in favor of the pin-connected bridge. The question was laid over for discussion at another meeting.
- —Robt. P. Linderman, '84, in consideration of the fact that Lehigh defeated Lafayette in both games this season, intends offering for competition a handsome silver cup, to be known as the 'Foot-ball championship cup of Pennsylvania." Each year the name of the team winning the State championship will be engraved thereon, and the cup will become the property of the college winning it for three consecutive years.
- —The Editor-in-Chief of the '90 *Epitome* Board has posted a notice to the effect that all class and fraternity cuts, eating club designs, class histories, and lists of clubs and fraternities must be in the hands of the publisher by Jan. 15, 1889. This early date would indicate that an effort is being made to have the *Epitome* out earlier than usual this year. Let us hope that the good intentions may be fully carried out.
- —Owing to the fact that the foot-ball management has not always been able to give exact dates for games with other colleges, The Burr has not been able to publish any regular schedule of the matches which were to be played. The last game of the season will have been won before this issue of The Burr reaches its readers, and we hope that the editorial intellects of the Cornell papers will then be relieved from the anxiety which has been so noticeably manifested concerning the result of the Elmira game.
- —We print the following clipping, taken from one of our daily papers, and sent to The Burr by some interested personage of Wilkes Barre: "Three *ladies*, one of Catasauqua, another of Bethlehem and the third from South Bethlehem, by the advice of some of their *gentlemen* friends, have taken a vow to cut all Lehigh University students from their list of escorts." It is with

pleasure we note that the *ladies* in question, finding that the well-being and good standing of the students are materially effected by spending their time in escorting such *ladies*, have taken this decided stand for the benefit of the college men.

-Prof. Merriman accompanied the Senior Civil Engineers on a visit of inspection to Drifton and Athens on Friday and Saturday, Nov. 9 and 10. Arriving at Drifton about 11 o'clock A. M., they were met by Mr. John Wagner, M. E., '85, who is in the employ of Coxe Bros. & Company. Mr. Wagner took the party through Breaker No. 1, owned and operated by the above named firm, and explained the interesting processes in connection with the preparation of anthracite coal for market. Leaving Drifton at 12:20, Athens was reached at 5 o'clock. The next morning the class visited the works of the Union Bridge Company, and were taken in charge by Mr. Maurice and his assistants. This part of the visit was very instructive, and afforded many new ideas as to the actual work of bridge design and construction. The return trip was without particular incident from a scientific point of view, and Bethlehem was reached at 9 o'clock on Saturday evening.

-It would have been difficult to conceive of a happier set of fellows than those composing the crowd which landed at the Union Depot on the evening of Nov. 17. We had defeated Lafayette on her own grounds notwithstanding the poor condition of our team, for unfortunately we have no graduate theologians whom we can import in order to sustain our reputation at foot-ball. The game was fairly won, and a large crowd assembled at the New Street Bridge at about 8 o'clock in the evening in order to let the good people of the Bethlehems know of our success. The procession passed up to Broad and down Main, saluting the fem. sems., according to tradition, and then turned toward Fountain Hill. Dr. Coppée always has a pleasant word for the paraders on such occasions, and the victorious

teams always fare well when they call on the Doctor. The homes of G. B. Linderman and Robert Linderman were also visited, and last but not least, the foot-sore and weary but enthusiastic crowd called on Dr. Lamberton, and received his heartiest congratulations upon the day's work.



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